

The Identification and Sampling of Priority 1 PFAS Sites in SE

NAS Whiting Field, Milton, FL

Presented By
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South East

Presentation Purpose and Objectives



- Navy PFAS Policy Implementation
- PFAS Investigation Timeline for NAVFAC SE Priority 1 Sites
- Summary of PFAS Investigations and Next Steps
 - -NCBC Gulfport
 - -NAS Meridian
 - OLF Joe Williams
 - -NAS Whiting Field
- Key Messages for RPM encountering PFAS Sites

2016 – DON Policy



- DASN (E) Policy Memo, 20 Jun 2016
 - -Immediate action to remove imminent threats to human health and the environment
 - Process to efficiently identify, validate, and prioritize the inventory of Sites and Areas of Concern (AOCs) with known, or potential, PFC/PFAS release
 - identify/address potential sites within existing Environmental Restoration Program inventory
 - CNIC/USMC data call to identify other potential PFAS AOCs based on release mechanisms defined in policy letter.
- Preliminary list of NAVFAC SE Priority 1 sites discussed with RPMs/ER Manager to refine list based on detailed, site-specific information
 - -NAVFAC SE, 3 Priority 1 PFAS installations
 - NAS Whiting Field, 1 PFAS (ERN) site
 - NCBC Gulfport, 1 PFAS (ERN) site
 - NAS Meridian, 2 PFAS (ERN) sites, additional 35 PFAS AOCs identified in NAS Meridian PA
- NAVFAC Atlantic managing a contract to investigate initial Priority 1 Sites in FY17

NAVFAC SE Priority 1 Investigation Timeline



• Fall 2016

- RPMs notified and begin preparation of individual Communication Plan and historical data compilation
- NAS Meridian schedule field events for on base well installations and PFAS sampling put on hold until off base sampling is scheduled

Winter 2016

- NAVFAC SE "Priority 1 Kick-off meeting" to review initial Communication Plans and GIS parcel mapping to define off-base sampling areas (1-mile downgradient of identified PFAS sites/AOCs)
- Initially assumed NO Public Meetings for NAVFAC SE installations
- -On-Site meeting with Command Staff of NAS Whiting Field, NCBC Gulfport, & NAS Meridian
 - NAS Meridian and NCBC Gulfport elected to make community notification through public meetings and press releases
 - NAS Whiting Field elected to have individual contact with potential impacted residences, with no public meeting

NAVFAC SE Priority 1 Investigation Timeline



Early Spring 2017

- Risk Communication Training for both NAS Meridian and NCBC Gulfport
 - During NAS Meridian risk communication training new information that NOLF Joe Williams may be a potential release site is identified
- On Base activities well installation and sampling for Site Investigation resume for NAS Meridian
- CODEL notification and notification letters sent to all potential impacted residents within defined sampling areas (1-mile downgradient of identified PFAS sites/AOCs) for all 3 NAVFAC SE Priority 1 installations

Spring 2017

- -Public Meetings held in Gulfport and Meridian
- Off-Base Drinking Water Sampling at all 3 NAVFAC SE Priority 1 installations

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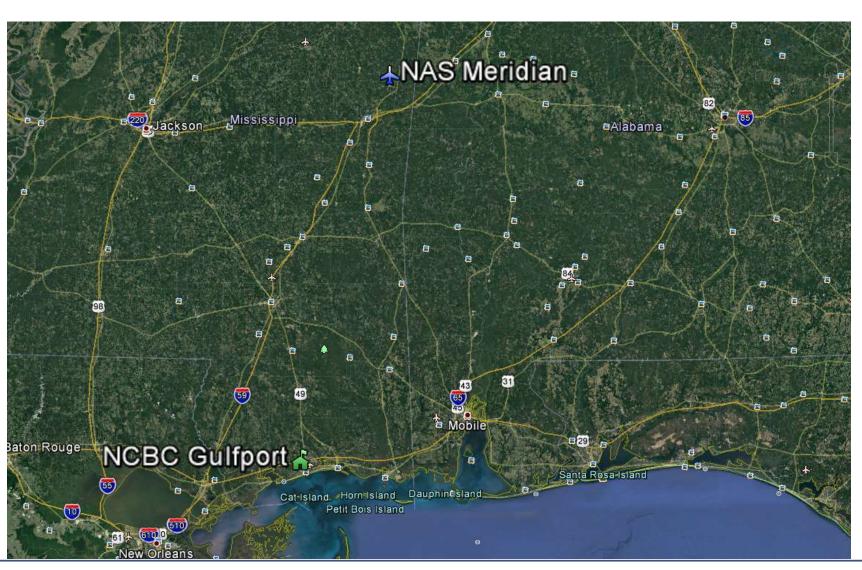
Congressional Delegation Notification.

- Notification to US House and US Senate Representatives via HQ
- Admiral Signature required
- Concurrent with Governor's office notification.

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NAS Meridian and NCBC Gulfport





NCBC Gulfport

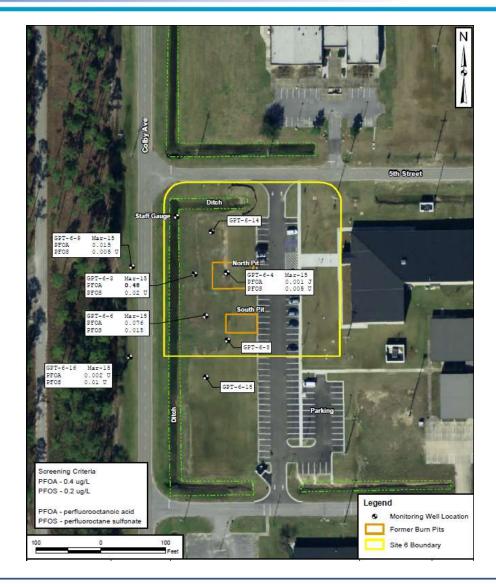




NCBC Gulfport Site 6



- Site 6 is former fighting training area
- PFAS suspected due to release of AFFF
- 2015 On-base Sampling Effort
 - -Two exceeding 70 ppt LHA (500 ppt PFOA/PFOS)
 - -Three detections, below LHA



NCBC Gulfport – PFAS Sampling and Notification Summary



Sampling Summary

- 148 parcels in the sampling area (1-mile downgradient of Site 6)
 - 106 parcels connected to municipal water supply
 - -5 properties confirmed to have private wells
 - 12 properties suspected to have private wells, but connected to municipal water supply
 - 5 properties permit Navy to collect samples

Off-Base Drinking Water Results

All 5 off-base sampling were ND for PFOA/PFOS

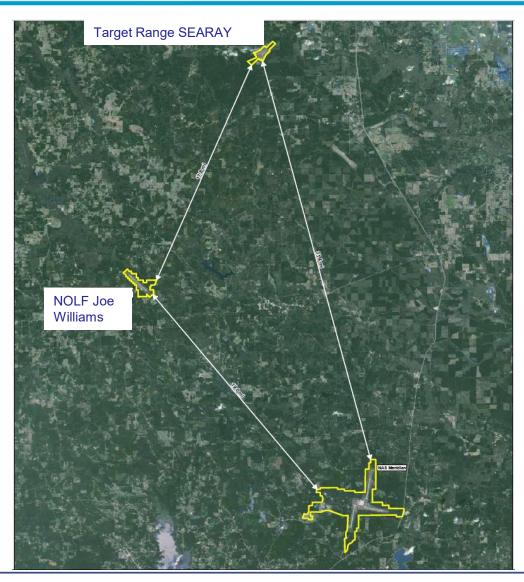
NCBC Gulfport PFAS Next Steps

- Complete Basewide PA (FY18)
- Initiate SI for identified PFAS sites (FY19)



NAS Meridian and NOLF Joe Williams



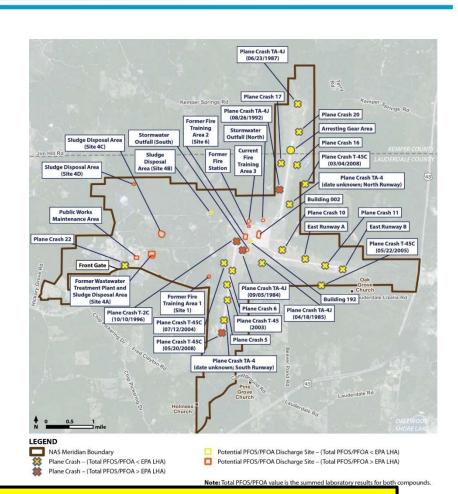


DON Environmental Restoration Training - February 23-25, 2016

NAS Meridian Priority 1 PFAS Sites/AOCs



- Priority 1 PFAS site identification
 - –2 ERN sites with potential PFAS release and potential DW source 1-mile downgradient
 - Site 4 (areas for WWTP sludge disposal)
 - Site 1 (Former Fire-fighting Training Area)
 - -No sites/AOCs identified in CNIC data call
 - -37 sites identified in basewide PA
 - Multiple crash sites
 - Emergency response equipment testing areas
- Priority 1 PFAS Sites/AOCs grouped into 2 PFAS Decision Units (DUs) for off-base drinking water investigation



KEY MESSAGE:

Basewide PA WILL identify new PFAS AOCs!!! As well as New IR sites

RPMs need to be prepared to assess potential for exposure and, IAW Navy policy, initiate off-base drinking water sampling promptly at any time during the PA/SI

NAS Meridian PFAS Sampling and Notification Summary



Sampling Summary

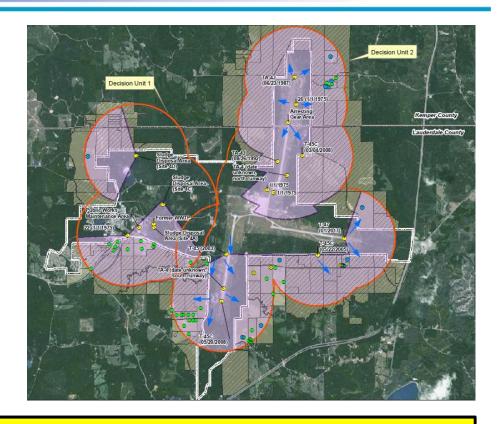
- 174 parcels in the sampling areas
 - -37 parcels connected to municipal water supply
 - -2 properties confirmed to have private wells
 - 12 properties suspected to have private wells, but connected to municipal water supply
 - 2 properties permit Navy to collect samples

Off-Base Drinking Water Results

All off-base sampling were ND for PFOA/PFOS

NAS Meridian PFAS Next Steps

Complete basewide SI (FY19)

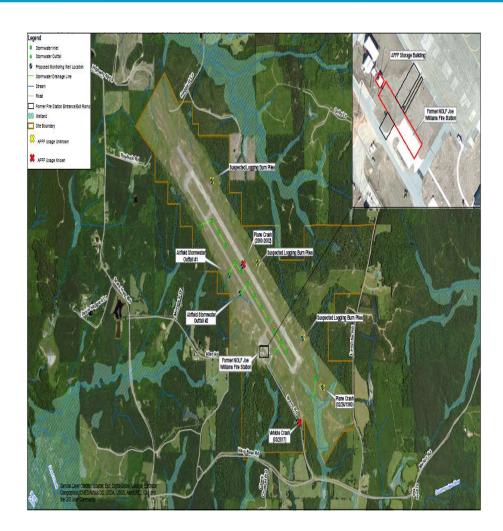


KEY MESSAGE: Without a comprehensive approach, identification of new sites/AOCs could have resulted in multiple off-base drinking water events at different times

NAS Meridian OLF Joe Williams (a new Priority 1 AOC)



- Identified during Risk Communication training by NAS Meridian CLPO
- Priority 1 PFAS site identification
 - -"New" fire station
 - -Former AFFF bulk storage building
 - –Emergency response locations (3 plane crashes [one off-base] and 1 vehicle crash)
 - Logging burn pile fire suppression (north of runway)
 - -Fuels area AFFF fire protection system and AFFF storage tank (?)
 - Radial groundwater flow, assumed; landing strip is at higher elevation, no MWs on-site
 - Potential drinking water wells with 1-mile from OLF boundary
- Tribal consultations required



OLF Joe Williams PFAS Sampling and Notification Summary



Sampling Summary

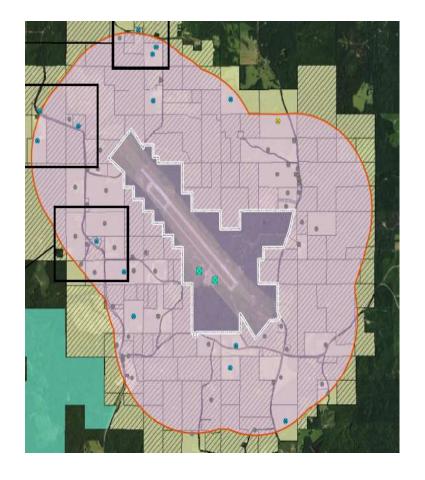
- 175 parcels in the sampling areas
 - -69 parcels connected to municipal water supply
 - -0 properties confirmed to have private wells
 - 1 property suspected to have private well, but connected to municipal water supply
 - 1 property permit Navy to collect samples

Off-Base Drinking Water Results

 The single well sampled was not used as a drinking water source however the Base Commanding Officer agreed to sample it, to garner good will with a neighbor

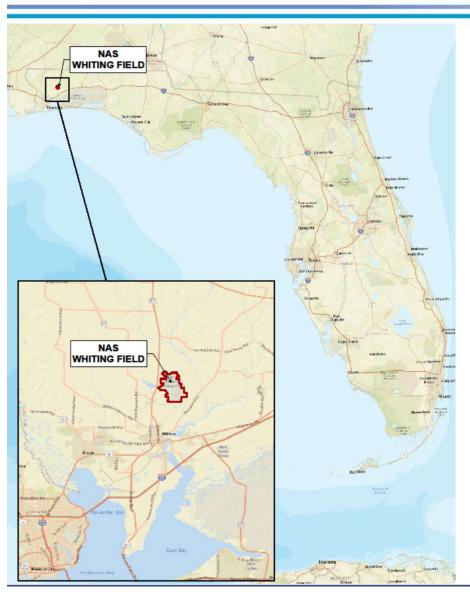
OLF Joe Williams Next Steps

Complete basewide PAI (FY18)



NAS Whiting Field

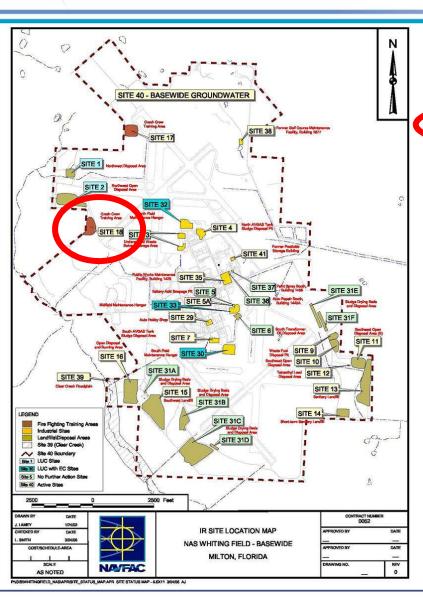




- Located in beautiful northwest Florida.
- The Naval Air Station Whiting celebrated its 75th year of continuous operation in July 2018.
- Their mission is to produce the military's best trained "Aviation Warfighter."
- Produces over 1,200 pilots a year.
- NAS Whiting Field owns 61% of Navy outlying landing fields, and 11% of all DoD flight hours are flown.

Site 18 – Crash Crew Training Area B





Site 17 – Crash Crew Training Area A

Site 18 – Crash Crew Training Area B

NAS Whiting Field – PFAS Sampling and Notification Summary

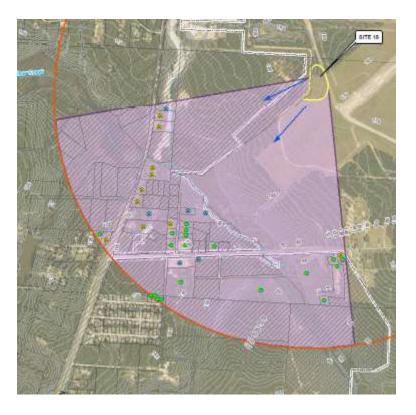


Sampling Summary

- 89 parcels in the sampling area (1-mile downgradient of Site 18)
 - –Many vacant lots (timberland)
 - -20 parcels connected to municipal water supply
 - -10 properties confirmed to have private wells
 - −6 properties suspected to have private wells
 - -9 properties with private wells sampled
 - -1 property with private well did not provide access

Notification Summary

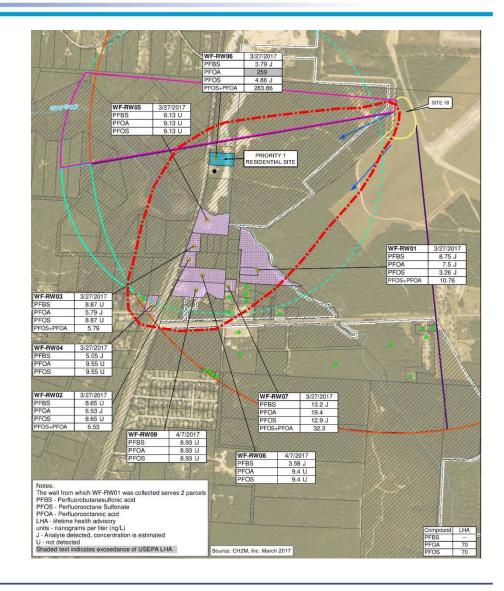
- CODEL notification completed on 3/13/2017
- Preparation session held on 3/14/2017 with Public Health Risk Communication Team
- Elected Official Stakeholder Notification on 3/15/2017
- Governor Notification on 3/15/2017
- No public meeting held but notification letters were sent out a week prior to the sampling date
- Sampling conducted at 7 locations on 3/27/2017; 2 additional samples collected on 4/7/2017



NAS Whiting Field PFAS Sampling Result Summary



- Initial Sampling Effort (Preliminary Results)
 - -One exceeding 70 ppt LHA (263.86 ppt PFOA/PFOS)
 - -Three detections, below LHA (5.79 to 32.3 ppt PFOS/PFOA)
 - -Four none-detects
- Bottled water immediately within 24 hrs
- Validation confirmed preliminary results
 Result letters sent to all properties
- Step-out sampling area defined (1/2 mile downgradient of LHA exceedance location)
 - All vacant lots and no wells needed sampling.
 Therefore, the step out was complete without additional sampling.



NTCRA for the LHA Exceedance



- Available options for offsite drinking water contamination:
 - 1. Continue to supply bottled water to resident
 - 2. Provide Point-of-Entry (POE) filtration of contaminated water from private well
 - 3. Supply municipal water connection to resident
 - 4. Drill a deeper extraction well into uncontaminated zone of the aquifer

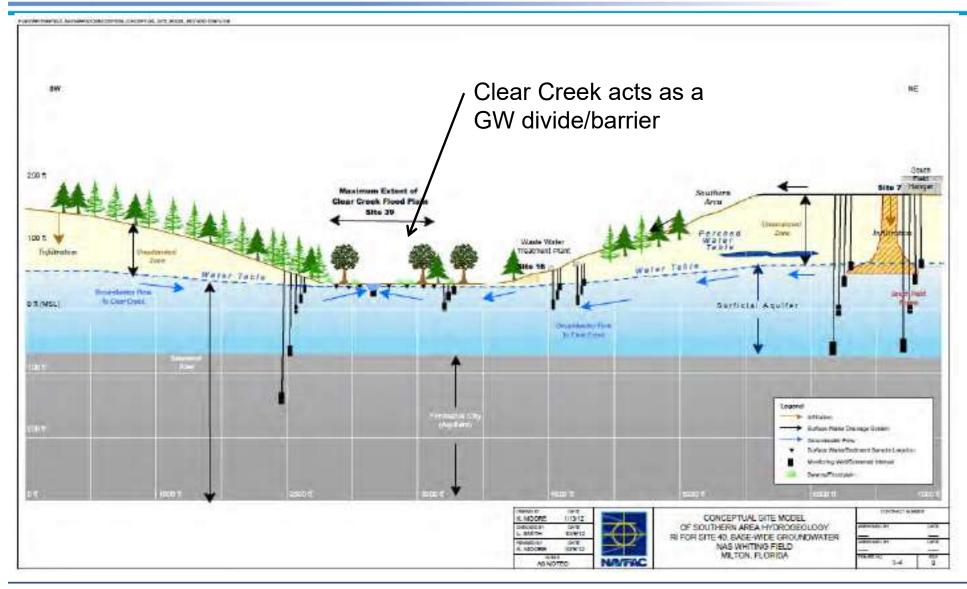
KEY MESSAGE: Navy is taking action to address exposure.

However, is the PFAS detected the result of a Navy release?

Let's look at the CSM......

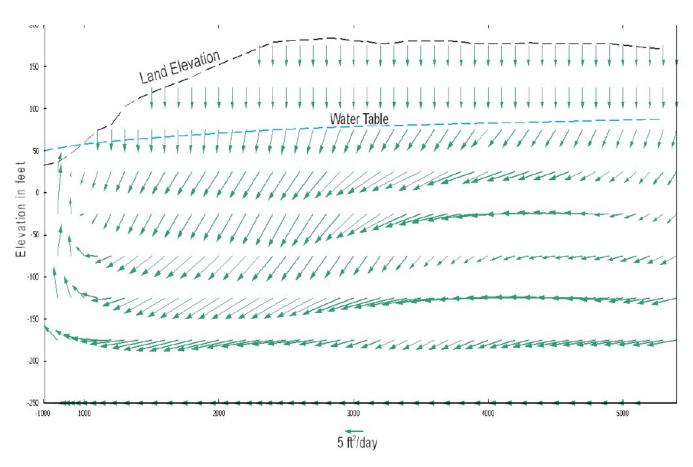
Conceptual Site Model





Clear Creek – Groundwater Divide?





Cross sectional view of groundwater flow vectors in the sand aquifer and unsaturated zone. Flow is to the west where even deep groundwater flow lines converge upward to discharge to Clear Creek.





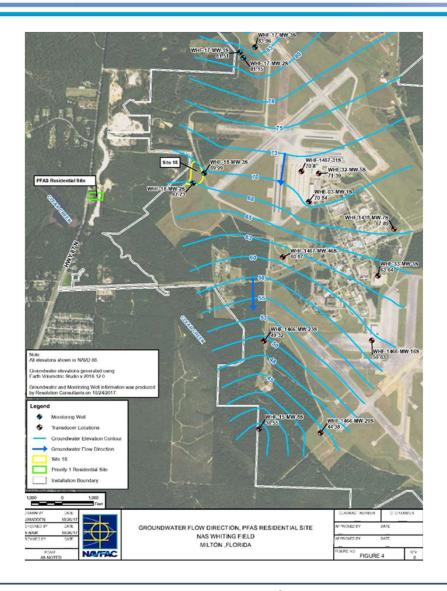
Clear Creek

Unnamed Tributary



Potential Impact to the CSM - GW Flow direction





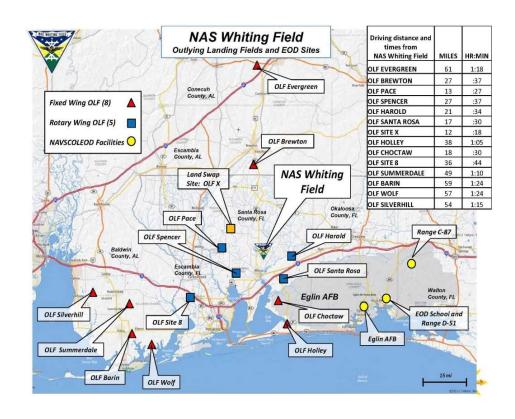


Groundwater-flow vectors in the sand aquifer across Site 40, NAS Whiting Field

NAS Whiting Field Next Steps -Navy PFAS Investigations



- Conduct Preliminary Assessment (PA) and Site Inspections on Main Base and 13 Outlying Landing Fields (OLFs)
- Find out where the PFAS detections are coming from. Is it really Site 18?



Additional Take-Aways



- 1. Priority 1 sampling and PASI efforts have different requirements and objectives
- 2. Work with Base Command and Partnering team members
 - Planning Public Meeting (Open House) with Stakeholders and Base Command staff, or determine NO Public meeting
 - b) Engage Navy and Marine Corps Public Health Risk Communication Team early in project
- 3. Engage stakeholders from federal, state, and local environmental and health agencies
- 4. Plan for many edits of the POAM; PFAS Team members must accept action items and assigned schedules
- Try to maintain continuity of PFAS Team from "Beginning to End"
- 6. Communication is key: Recognize the diversity of the stakeholders involved.

‡ BE PREPARED FOR THE LONG RIDE ON THE EMOTIONAL ROLL-A-COASTER, RELY ON YOUR TEAM TO DEAL WITH THE UPS AND DOWNS

Knowledge Check



If you have a PFAS site, you should:

- A. Notify your ER Manager
- B. Plan to conduct a Basewide PA/SI, and be ready to initiate a Priority 1 Off-Base Drinking Water Investigation at any time during that efforts.
- C. Call Mario for more money
- D. Buckle in and get ready for the PFAS Emotional Journey
- E. All the Above

Contacts and Questions



Points of Contact

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Questions?